CONSTRUCTION PERMIT - NSPS SOURCE

PERMITTEE

ExxonMobil Corporation
Attn: David O. Moles
2312 Terminal Drive

Arlington Heights, Illinois 60005

<u>Application No.</u>: 02080069 <u>I.D. No.</u>: 031009ACB

Applicant's Designation: Date Received: August 15, 2002

Subject: Loading Rack and Tanks

Date Issued:

Location: 2312 Terminal Drive, Arlington Heights

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a modification to the source to increase petroleum product throughput rates for storage tanks and a loading rack as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. Operation of the rack for gasoline shall not exceed a throughput of 50,000,000 gallons/month and 555,000,000 gallons/year. For this purpose, gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kPa or greater, which is used as a fuel for internal combustion engines, as defined by 35 IAC 211.2570.
- b. Operation of the rack for distillate oil shall not exceed a throughput of 20,000,000 gallons/month and 125,615,000 gallons/year.
- 2a. i. Emissions from storage of material including roof landing losses, by category of service, shall not exceed the following limits:

| | VOM Emission | |
|---------------------------|--------------|-----------------------|
| Service | (Tons/Month) | (Tons/Year) |
| | | |
| Gasoline | 3.33 | 39.80 |
| Distillate Oil | | 1.45 |
| Other (Ethanol, Additive, | | |
| Product Water/Mixture) | | 1.03 |
| | Total | 1: $\overline{42.28}$ |

- ii. Fugitive emissions of VOM from leaking components (valves, pumps, flanges, etc.) associated with storage tanks shall not exceed 0.58 tons/year.
- iii. Emissions of VOM associated with the cleaning of storage tanks shall not exceed 1.41 tons/year.

b. i. Emissions from the loading rack shall not exceed the following limits:

| | VOM Emissions | | |
|--------------------|---------------|--------------|--|
| Service | (Tons/Month) | (Tons/Year) | |
| | | | |
| Gasoline Loading | 0.50 | 5.49 | |
| Distillate Loading | 0.14 | 0.89 | |
| Fugitives | | 18.53 | |
| | TOTAL | <u>24.91</u> | |

- ii. The total organic emission rate for the loading rack, excluding fugitive losses, shall not exceed 2.37 milligrams per liter of gasoline loaded.
- iii. Emissions attributable to combustion of fuel in the vapor collection system shall not exceed the following limits:

| | Emissions | | |
|---------------------------------|--------------|----------------|--|
| Pollutant | (Tons/Month) | (Tons/Year) | |
| Nitrogen Oxides Carbon Monoxide | 1.17 2.92 | 11.36 28.40 | |

- 3. The source has addressed the applicability and compliance of 35 IAC Part 203, Major Stationary Sources Construction and Modification (See Attachment 1). The limits established by this permit are intended to ensure that the modification addressed in this construction permit does not constitute a major modification pursuant to these rules.
- 4. The Permittee shall maintain records of the following items:
 - a. Throughput for each type of product through each storage tank (gallons/month and gallons/year);
 - b. Throughput for each type of product through the loading rack (gallons/month and gallons/year); and
 - c. VOM emissions from each tank and the loading rack (tons/month and tons/year) with supporting calculations.
- 5a. By March 31, 2003, the VOM emissions of the vapor collection unit shall be measured by an approved testing service, during conditions that are representative of maximum emissions. These tests shall be conducted in accordance with 40 CFR 60.503.
- b. At least 30 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

- i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
- ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.
- iii. The specific determinations of emissions and operation which are intended to be made, including sampling and monitoring locations.
- iv. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods.
- v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- vi. The format and content of the Source Test Report.
- c. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
 - i. A summary of results
 - ii. General information
 - iii. Description of test method(s), including description of sampling
 points, sampling train, analysis equipment, and test schedule
 - iv. Detailed description of test conditions, including
 - A. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing, and
 - C. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration
 - vi. An explanation of any discrepancies among individual tests or anomalous data.

- d. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of thirty days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- e. Two copies of reports and notifications required by this permit shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

and one copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

- 6a. This permit does not relax or revise requirements for storage tanks and the loading rack as established in 40 CFR 60, Subpart XX and 35 IAC 218 and set forth in the Clean Air Act Permit Program (CAAPP) permit for the source, CAAPP Permit 95060060.
- b. This permit does not relax or revise recordkeeping, monitoring, testing, or reporting requirements set forth in the CAAPP Permit for the source. In addition, general requirements of the CAAPP permit with respect to retention and availability of records and submission of reports shall apply to the recordkeeping and reporting requirements of this permit.
- 7. This permit establishes new operating and emission limitations for the loading rack and tanks that will supersede requirements for the loading rack and tanks established in the CAAPP permit.
- 8. The storage tanks and loading rack may be operated under this construction permit until renewal of the CAAPP permit or a modification of the CAAPP permit has been issued provided a timely application is submitted to amend the CAAPP permit to incorporate this modification.

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If you have any questions on this, please call Jason Schnepp at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

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cc: Region 1

Attachment 1

Nonattainment NSR Applicability - VOM Netting Analysis

Contemporaneous Time Period of 1998 Through 2002

Table I - Emissions Increases and Decreases Associated With The Proposed Modification

| Item of Equipment | | Past Actual* (Tons/Yr) | Future Potential (Tons/Yr) | Emissions Increase (Tons/Year) |
|-------------------------------------|--------|------------------------------|----------------------------|--------------------------------------|
| Gasoline Storage Tanks | | 32.81 | 39.80 | 6.99 |
| Distillate Storage Tanks | | 1.14 | 1.45 | 0.31 |
| Ethanol Storage Tanks | | 0.12 | 0.25 | 0.13 |
| Additive Storage Tanks | | 0.04 | 0.06 | 0.02 |
| Product Water/Mixture Storage Tanks | | 0.02 | 0.72 | 0.70 |
| Fugitives (Storage Tank Related) | | 0.52 | 0.58 | 0.06 |
| Loading Rack (Distillate Service) | | 0.49 | 0.89 | 0.40 |
| Loading Rack (Gasoline Service) | | 2.93 | 5.49 | 2.56 |
| Loading Rack Fugitives | | 8.15 | 18.53 | 10.38 |
| Tank Cleaning | | 0.35 | 1.41 | 1.06 |
| | Total: | 46.57 | 69.18 | 22.61 |

^{*} The Past Actual emissions are calculated by taking the average of the emission data from the previous two calendar years (2000 and 2001).

Table II - Source-Wide Creditable Contemporaneous Emission Increases

| | Emissions | | |
|-------------------|-------------|--------|------|
| | Increase | Permit | |
| Item of Equipment | (Tons/Year) | Number | Date |

None

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

| | Commencement of | Emissions | |
|-------------------|-----------------|-------------|---------------|
| | Operational | Decrease | |
| Item of Equipment | Change Date | (Tons/Year) | Permit Number |

None

Table IV - Net Emissions Change

| | (Tons/Year) |
|---|-------------|
| Increases and Decreases Associated With The Proposed Modification | 22.61 |
| Creditable Contemporaneous Emission Increases | 0.00 |
| Creditable Contemporaneous Emission Decreases | 0.00 |
| | 22.61 |

PROJECT SUMMARY

I. INTRODUCTION

An application has been voluntarily submitted by ExxonMobil Corporation to modify their terminal to allow for an increase in petroleum product throughput for storage tanks and a loading rack. The construction permit will have federally enforceable limitations on the emission units. These limits would prevent the facility from triggering 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM). The proposed limits would be accompanied by recordkeeping and reporting requirements.

II. SOURCE DESCRIPTION

ExxonMobil is located in Arlington Heights, Illinois, Cook County. Cook County is designated as attainment for all pollutants except ozone, which is designated as severe nonattainment. The construction permit application requests an increase in throughput for several storage tanks and a loading rack. The permit has limitations on the volatile organic material emissions as well as throughput limitations. These limits are required to ensure that the net emissions increase for this project as well as all other projects since 1998 will not exceed 25 tons per year for volatile organic material.

III. EMISSIONS

Emissions limits from this project will be established to ensure that a major modification does not occur.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board has standards for sources of volatile organic material. This site readily complies with all applicable Board standards.

V. PROPOSED PERMIT

The conditions of the proposed permit contain limitations and requirements to assure that this facility will not trigger the requirements of 35 IAC Part 203: Major Stationary Sources Construction and Modification (MSSCAM). The permit sets limitations on volatile organic material emissions. The permit conditions also establish appropriate compliance procedures, including inspection practices, recordkeeping requirements, and reporting requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the facility is operating within the limitations set by the permit and are properly controlling emissions.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the facility meets all applicable state and federal air pollution control requirements, subject to the conditions proposed in the draft permit. The Illinois EPA is therefore proposing to issue a permit with federally enforceable limits for this construction project.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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